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ABSTRACT

This curriculum guide contains a listing of all common-core competencies that should be taught in Arizona community colleges in order to prepare students to meet the requirements of basic and refresher emergency medical technician training. Identified through a statewide project, the competencies cover the following topics: introduction to emergency care training; airway obstruction and respiratory arrest; cardiac arrest; mechanical aids to breathing and resuscitation; bleeding, shock, and practice in airway care, pulmonary resuscitation, and cardiopulmonary resuscitation; wounds; fractures in upper extremities and lower extremities; injuries of the head, face, neck, and spine; injuries of the eye, chest, abdomen, and genitalia; medical emergencies (two sections); emergency childbirth; environmental emergencies; lifting and moving patients; extrication from automobiles; daily routines on the job; and responding to an ambulance call. These general topics are broken down into specific competencies, and the time needed to teach each competency is suggested. (KC)

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COMPETENCY-BASED COMMON-CORE CURRICULUM
FOR
EMERGENCY MEDICAL TECHNICIAN EDUCATION

September 1982

Prepared For:

STATE BOARD OF DIRECTORS FOR
COMMUNITY COLLEGES OF ARIZONA

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INTRODUCTION

For some time, leaders in Emergency Medical Technician Education in Arizona have advocated the need to develop a common-core curriculum that would be recognized statewide by emergency medical service educators, postsecondary institutions of higher learning, and the Arizona Department of Health Services.

To meet this need, the Associate Director for Educational Services of the State Board of Directors for Community Colleges of Arizona prepared a grant proposal to develop a "Competency-Based, Common-Core Curriculum for Emergency Medical Technician Education." The Presidents' Council recognized the importance of this project and recommended that a proposal for funding be submitted to the Arizona Department of Education. The State Board of Directors for Community Colleges approved this action. The proposal was submitted and a grant was awarded by the Arizona Department of Education's Research Coordinating Unit. The project starting date was December 1981.

The objectives of this project include:

1. The identification of a common-core curriculum that satisfies the needs of emergency medical technician education students attending Arizona community colleges.

2. The development of an inventory of competencies and skills needed by students to reasonably assure success when enrolling in a common-core curriculum at an Arizona community college.

3. To result in a competency-based, common-core curriculum that will be: (a) adopted by the community colleges of Arizona; (b) satisfy the new guidelines for licensure of the Arizona Department of Health Services; (c) recognized by emergency medical service educators in Arizona; and (d) secured by common agreement among the Arizona community colleges.

To this end, the following common-core curricula were identified by an Advisory Council composed of experts in Emergency Medical Technician Education:

Basic Emergency Medical Technician Education

Refresher Training Program for Basic Emergency Medical Technician Education

The above competency-based, common-core curricula are designed to satisfy the needs of students for:

1. prelicensing educational requirements for Basic Emergency Medical Technician.

2. the educational requirements for renewal of Basic Emergency Medical Technician licensure.

3. partially completing the educational requirements for students enrolled in A.A.S. degree programs in Paramedical Education.

Each course identified as common-core was evaluated to determine the minimum competencies that were "universal" to the nature of the course and was correlated to reflect current Arizona practices. It should be noted that the inventories of minimal competencies identified should not be construed as representing the entire content for each course. Any competencies not included were simply not identified as "universal." Such competencies varied in importance according to instructor preferences, student needs, and/or the geographic location of the community college.

Each common-core course has been divided into modules of instruction. Within each module the minimal competencies listed are those which should be mastered by the student before he/she progresses to the next module in the sequence. The Advisory Council for Emergency Medical Technician Education strongly recommends the establishment of the competencies identified here as minimal standards for Emergency Medical Technician Education

at the community college level. While these standards will not, in themselves, ensure that all students will achieve the required levels of competency, such standards will ensure student mastery of at least the minimal competencies as each common-core course is completed.

The achievement of this project's objectives would not have been possible without the many hours of dedicated committee time expended by the Emergency Medical Technician Education Advisory Council. The project staff expresses sincere gratitude for their splendid cooperation, valuable suggestions, and final validation.

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The project staff would also like to thank Shirley Mannion of the Arizona Department of Education who did an excellent job as liaison among the Arizona Department of Education, the Advisory Council, and the project staff.

Our gratitude is extended to the State Board of Directors for Community Colleges of Arizona who made it possible to complete this grant.

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BASIC EMERGENCY MEDICAL TECHNICIAN EDUCATION

INVENTORY OF MINIMUM COMPETENCIES

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Basic Emergency Medical Technician Education

The following competencies are based upon the minimal concepts that are basic to the scope of this course. In no manner should these competencies be construed as providing the maximum knowledge to be gained by the student in completing this course.

1. Introduction to Emergency Care Training (Suggested time 3 hours) - After completing this module, the student will be able to:

    1.1 Describe the scope and emphasis of this course to include:

        1.1.1 The need for training

        1.1.2 The purpose and emphasis of training

        1.1.3 The course scope and the materials needed

    1.2 Define the roles and responsibilities of an EMT to include:

        1.2.1 Patient examination

        1.2.2 Prompt and efficient care

        1.2.3 Appropriate patient handling

        1.2.4 Safe and efficient patient transport

        1.2.5 Orderly transfer of patient to emergency departments

        1.2.6 Communications

        1.2.7 Reporting, writing, and record keeping

        1.2.8 Describing the local circumstances for implementation of a medical emergency including:

            1.2.8.1 Identification of the agencies involved

            1.2.8.2 Basic organizational structure at the scene

            1.2.8.3 Responsibilities of the agencies involved

            1.2.8.4 Role of the EMT at the scene

1.3 Describe the personal attitudes and conduct expected of an EMT to include:

1.3.1 Professional manner

1.3.2 Appearance

1.3.3 General conduct

1.4 Identify the legal aspects of emergency care to include:

1.4.1 Duty to act

1.4.2 Standard of care including:

1.4.2.1 The type of individual and community conduct

1.4.2.2 Standards imposed by law

1.4.2.3 Professional and/or institutional standards

1.4.3 Consent including:

1.4.3.1 Actual consent

1.4.3.2 Implied consent

1.4.3.3 Minor's consent

1.4.3.4 Consent of the mentally ill

1.4.4 Right to refuse treatment including:

1.4.4.1 Government immunities

1.4.4.2 Good Samaritan laws

1.4.4.3 EMT and paramedic statutes

1.4.4.4 Exemption from the Medical Practice Act

1.4.4.5 Effect of licensure and certification

1.5 Demonstrate a knowledge of the major body systems and their general functions to include:

1.5.1 The skeletal system and body cavities including:

1.5.1.1 Skull

1.5.1.2 Spinal column

1.5.1.3 Upper extremities

1.5.1.4 Thoracic (rib) cage

1.5.1.5 Abdominal cavity

1.5.1.6 Pelvic cavity

1.5.1.7 Lower extremities

1.5.2 Muscular system including:

1.5.2.1 Voluntary muscles

1.5.2.2 Involuntary muscles

1.5.2.3 Cardiac muscle

1.5.3 Nervous system

1.5.4 Respiratory system including:

1.5.4.1 Nose and mouth

1.5.4.2 Pharynx

1.5.4.3 Larynx

1.5.4.4 Trachea

1.5.4.5 Bronchi

1.5.4.6 Lungs

1.5.5 Circulatory system

1.5.6 Digestive system including:

1.5.6.1 Mouth and throat

1.5.6.2 Esophagus

1.5.6.3 Stomach

1.5.6.4 Liver

1.5.6.5 Gall bladdar

1.5.6.6 Pancreas

1.5.6.7 Intestines

1.5.6.8 Rectum

1.5.7 Genitourinary system including:

1.5.7.1 Kidneys

1.5.7.2 Ureter

1.5.7.3 Urethra

1.5.7.4 Bladder

1.5.7.5 Male and female reproductive organs

1.6 Demonstrate a knowledge of topographic anatomy terminology to include:

1.6.1 Right and left (patient)

1.6.2 Surface areas including:

1.6.2.1 Anterior

1.6.2.2 Posterior

1.6.3 Midline

1.6.4 Proximal and distal

1.6.5 Superior and inferior

1.7 Distinguish between a sign and a symptom to include:

1.7.1 Use in diagnosis

1.8 Identify the diagnostic signs as contrasted to normal states to include:

1.8.1 Pulse

1.8.2 Respiration

1.8.3 Blood pressure

1.8.4 Temperature

1.8.5 Skin color

1.8.6 Pupils (eyes)

1.8.7 State of consciousness

1.8.8 Inability to move on command

1.8.9 Reactions to pain

1.9 Explain the significance of medical identification symbols such as bracelets or necklaces

2. Airway Obstruction and Respiratory Arrest (Suggested time 3 hours) - After completing this module, the student will be able to:

2.1 Describe the importance of oxygen to the body (particularly to the brain)

2.2 Demonstrate a knowledge of components of the respiratory system and describe their function to include:

2.2.1 Pharynx

2.2.2 Trachea

2.2.3 Epiglottis

2.2.4 Larynx

2.2.5 Bronchi

2.2.6 Lungs

2.2.7 Diaphram and rib muscle

2.2.8 Pleura

2.3 Describe the signs of adequate and inadequate breathing

2.4 Describe airway care and resuscitation procedures for patients with and without spine injuries, for neck breathers, and for infants and small children to include:

2.4.1 Obstruction by the tongue

2.4.2 Techniques of care including:

2.4.2.1 Head-tilt maneuver

2.4.2.2 Chin-lift, head-tilt maneuver

2.4.2.3 Jaw-thrust maneuver

2.4.2.4 Face-down position

2.4.3 Need for pulmonary resuscitation

2.4.4 Suspected spinal injuries

2.5 Demonstrate pulmonary resuscitation to include:

2.5.1 Inhalation of oxygen and expiration of air

2.5.2 Mouth-to-mouth technique

2.5.3 Mouth-to-nose technique

2.5.4 Variations for infants

2.5.5 Variations of the jaw thrust maneuver

2.5.6 Gastric distention

2.6 Demonstrate a knowledge of the laryngectomee (neck breather) to include:

2.6.1 The condition of the patient

2.6.2 Airway care procedures

2.7 Demonstrate a knowledge of dislodging foreign objects from the airway to include:

2.7.1 Importance of ventilating lungs first

2.7.2 Loose material

2.7.3 Lodged material

3. Cardiac Arrest (Suggested time 3 hours) - After completing this module, the student will be able to:

3.1 Describe the function of the circulatory system and the heart in supplying oxygen to the body cells to include:

3.1.1 Arteries

3.1.2 Veins

3.1.3 Capillaries

3.1.4 The heart including:

3.1.4.1 The design of the heart

3.1.4.2 The heart as a pump

3.1.4.3 Location of the heart

3.2 Describe the signs of cardiac arrest to include:

3.2.1 Not breathing

3.2.2 No carotid pulse

3.3 Demonstrate techniques of cardiopulmonary resuscitation to include:

3.3.1 General procedures including:

3.3.1.1 Firm surface

3.3.1.2 Ventilation

3.3.1.3 Positioning of hands

3.3.1.4 Positioning of body

3.3.1.5 Amount of compression

3.3.1.6 Rate of compression

3.3.2 One-man technique including:

3.3.2.1 Airway

3.3.2.2 Ventilation

3.3.2.3 Compression

3.3.2.4 Alternations

3.3.3 Two-man technique including:

3.3.3.1 Airway

3.3.3.2 Ventilation

3.3.3.3 Compression

3.3.3.4 Alternations

3.3.3.5 Changing positions

3.3.4 Infants and children

3.3.5 Signs of effective CPR

3.3.6 CPR interruption

3.3.7 Witnessed cardiac arrest

3.3.8 Complications

3.3.9 Beginning and terminating CPR

4. Mechanical Aids to Breathing and Resuscitation (Suggested time 3 hours)

- After completing this module, the student will be able to:

4.1 Demonstrate the purpose, design requirements, asceptic procedures, and use of the following equipment:

4.1.1 Oropharyngeal airways

4.1.2 Nasopharyngeal airways

4.1.3 Portable suction units

4.2 Demonstrate the purpose and use of oxygen equipment to include:

4.2.1 Patients needing oxygen

4.2.2 Dangers in using oxygen

4.2.3 Oxygen equipment including:

4.2.3.1 Cylinders

4.2.3.2 Pressure regulators and flowmeters

4.2.3.3 Equipment operating procedures

4.3 Demonstrate the purpose and use of oxygen delivery equipment to include:

4.3.1 Nasal cannula

4.3.2 Facemask

4.3.3 Mask and bag

4.3.4 Venturi masks

4.4 Demonstrate the purpose, design requirements, and use of equipment used for ventilation and oxygen delivery to include:

4.4.1 Pocket-mask with oxygen inlet valve (mouth-to-mask system)

4.4.2 Bag-valve-mask resuscitation

4.4.3 Demand-valve resuscitation

5. Bleeding, Shock, and Practice in Airway Care, Pulmonary Resuscitation and Cardiopulmonary Resuscitation (Suggested time 3 hours) - After completing this module, the student will be able to:

5.1 Describe the physiology of circulation to include:

5.1.1 Heart

5.1.2 Arteries

5.1.3 Capillaries

5.1.4 Veins

5.1.5 Pulse

5.1.6 Blood including:

5.1.6.1 Composition

5.1.6.2 Functions

5.1.6.3 Perfusion

5.1.7 Blood pressure including:

5.1.7.1 Definition

5.1.7.2 Measurement

5.2 Describe the meaning of shock, signs of shock and the emergency care for shock to include:

5.2.1 Causes of shock

5.2.2 Results of shock

5.2.3 Types of shock including:

5.2.3.1 Hemorrhagic (hypovolemic) shock due to blood loss

5.2.3.2 Respiratory shock due to inadequate breathing

5.2.3.3 Neurogenic shock due to loss of vascular control by the nervous system

5.2.3.4 Psychogenic shock due to fainting

5.2.3.5 Cardiogenic shock due to inadequate functioning of the heart

5.2.3.6 Septic shock due to severe infection

5.2.3.7 Anaphylactic shock due to allergic reaction

5.2.3.8 Metabolic shock due to bodily loss of fluid

5.2.4 General signs and symptoms

5.2.5 Signs and symptoms of anaphylactic shock

5.2.6 Emergency care

5.3 Describe the differences between arterial, venous, and capillary bleeding

5.4 Identify and describe means for controlling external bleeding to include:

5.4.1 Degree of seriousness

5.4.2 Types of bleeding including:

5.4.2.1 Artery

5.4.2.2 Vein

5.4.2.3 Capillary

5.4.3 Control of bleeding including:

5.4.3.1 Direct pressure

5.4.3.2 Pressure points

5.4.3.3 Tourniquet

5.4.3.4 Splints

5.4.4 Nosebleeds (Epistaxes)

5.5 Demonstrate a knowledge of Military Anti-Shock Trousers (MAST) to include:

5.5.1 A description of the garment and its use

5.5.2 Advantageous effects including:

5.5.2.1 Auto-transfusion

5.5.2.2 Increase of vascular resistance

5.5.2.3 Tamponading effect

5.5.2.4 Decreasing hemorrhage rate

5.5.2.5 Immobilizing fractures

5.5.3 Indications for use including:

5.5.3.1 Hypovolemic shock

5.5.3.2 Systolic blood pressure of 100mm Hg or below when shock symptoms are present

5.5.3.3 Apply but do not inflate when shock is anticipated

5.5.4 Contra-indications for use including:

5.5.4.1 No inflation when patient has:

5.5.4.1.1 Open chest wound/hemo-pneumothorax

5.5.4.1.2 Congestive heart failure

5.5.4.1.3 Pulmonary edema

5.5.4.2 Limited inflation when patient:

5.5.4.2.1 Is pregnant (inflate legs only)

5.5.4.2.2 Has abdominal eviscerations (inflate legs only)

5.5.4.2.3 Is impaled on an object (Do not inflate over impaled object)

5.5.5 Describe possible adverse effects from MAST suit application

5.5.6 Demonstrate the procedure for MAST suit application to include:

5.5.6.1 Application

5.5.6.2 Inflation

5.5.6.3 Monitoring of patient

5.5.7 Describe special considerations when a MAST suit is used to include:

5.5.7.1 Administration of oxygen

5.5.7.2 Local protocols

5.5.7.3 Effect of reduced pressure during air transport

5.5.7.4 Effect of environmental temperature change

5.5.8 Describe the care and maintenance of MAST suits

5.5.9 Demonstrate the procedure for the deflation and removal of a MAST suit

5.6 Describe the signs, symptoms, and emergency care for internal bleeding

6. Wounds (Suggested time 3 hours) - After completing this module, the student will be able to:

6.1 Describe the functions of the skin to include:

6.1.1 Protection of the body

6.1.2 Regulation of body temperature

6.1.3 Layers including:

6.1.3.1 Epidermis

6.1.3.2 Dermis

6.1.3.3 Subcutaneous tissue

6.2 Identify the various wound types to include:

6.2.1 Closed soft-tissue injuries including:

6.2.1.1 Types

6.2.1.2 Management

6.2.2 Open soft-tissue injuries including:

6.2.2.1 Types

6.2.2.2 Management

6.3 Describe the emergency care appropriate to each wound type to include:

6.3.1 Functions

6.3.2 Dressings

6.3.3 Bandages including:

6.3.3.1 Purpose

6.3.3.2 Types

6.3.4 Applying a pressure dressing

7. Principles of Musculoskeletal Care and Fractures of the Upper Extremity (Suggested time 3 hours) - After completing this module, the student will be able to:

7.1 Describe the muscular system to include:

7.1.1 Functions

7.1.2 Types of muscles including:

7.1.2.1 Voluntary (skeletal)

7.1.2.2 Involuntary (smooth)

7.1.2.3 Cardiac

7.2 Identify all the bones in the upper extremity to include:

7.2.1 Skull

7.2.2 Spinal Column

7.2.3 Thorax

7.2.4 Upper extremity including:

7.2.4.1 Shoulder girdle

7.2.4.2 Arm

7.2.4.3 Forearm

7.2.4.4 Hand

7.3 Identify all the bones in the lower extremity to include:

7.3.1 Pelvis

7.3.2 Hip joint

7.3.3 Upper leg (thigh)

7.3.4 Lower leg

7.3.5 Foot

7.3.6 Kneecap

7.4 Describe the general concepts of fractures, sprains and dislocations to include:

7.4.1 Fractures including:

7.4.1.1 Definition

7.4.1.2 Types

7.4.1.3 Signs

7.4.2 Dislocations including:

7.4.2.1 Definition

7.4.2.2 Types

7.4.2.3 Signs

7.4.3 Sprains including:

7.4.3.1 Definition

7.4.3.2 Signs

7.4.4 Differentiating among fractures, dislocations, and sprains including:

7.4.4.1 Differentiating signs

7.5 Demonstrate the procedures for examining patients for fractures of the extremities to include:

7.5.1 Survey stages

7.5.2 Secondary survey including:

7.5.2.1 Head

7.5.2.2 Neck

7.5.2.3 Upper extremities

7.5.2.4 Chest

7.5.2.5 Back and buttocks

7.5.2.6 Abdomen and pelvis

7.5.2.7 Lower extremities

7.5.2.8 Medical alert symbols

7.6 Describe reasons for splinting fractures to include:

7.6.1 General rules

7.7 Describe the causes, signs, and demonstrate the techniques of care for fractures of the upper extremity to include:

7.7.1 Equipment needed

7.7.2 Fractures of the clavicle

7.7.3 Fractures of the scapula

7.7.4 Dislocations of the acromioclavicular joint

7.7.5 Anterior dislocation of the shoulder joint

7.7.6 Fractures of the humerus including:

7.7.6.1 Proximal end

7.7.6.2 Shaft

7.7.6.3 Distal end

7.7.7 Dislocations of the elbow joint

7.7.8 Fractures of the proximal ulna and radius

7.7.9 Fractures of the forearm

7.7.10 Fractures of the wrist

7.7.11 Fractures and dislocations of the hand and fingers

8. Fractures of the Pelvis, Hip, and Lower Extremity (Suggested time 3 hours) - After completing this module, the student will be able to:

8.1 Identify the bones in the lower extremity

8.2 Describe the causes, signs, dangers, and demonstrate the emergency care for:

8.2.1 Fractures of the pelvis

8.2.2 Anterior and posterior dislocations of the hip

8.2.3 Fractures of the hip

8.2.4 Fractures of the shaft of the femur

8.2.5 Sprains, dislocations, and fractures of the knee

8.2.6 Dislocations of the patella

8.2.7 Fractures of the tibia and fibula shaft

8.2.8 Injuries about the ankle

8.2.9 Fractures of the foot

9. Injuries of the Head, Face, Neck, and Spine (Suggested time 3 hours) - After completing this module, the student will be able to:

9.1 Describe the function of the nervous system to include:

9.1.1 Identification of components

9.1.2 Brain

9.1.3 Spinal Cord

9.1.4 Nerves

9.1.5 Actions of muscles

9.2 Demonstrate the procedures for emergency medical care for injuries to the spine to include:

9.2.1 Dangers

9.2.2 Signs

9.2.3 Steps for checking signs and symptoms

9.2.4 Complications

9.2.5 Procedure for emergency care

9.3 Describe the management of patients with skull fractures and/or brain injuries to include:

9.3.1 Skull fractures including:

9.3.1.1 Types

9.3.1.2 Cerebrospinal fluid

9.3.1.3 Signs

9.3.2 Injuries to the brain including:

9.3.2.1 Concussion

9.3.2.2 Contusion

9.3.2.3 Cerebral hematoma

9.3.3 Procedure for emergency care

9.4 Demonstrate the procedures for the continuous monitoring and evaluation of the unconscious patient and the implications of the data obtained to include:

9.4.1 Special management and evaluation

9.4.2 Airway support

9.4.3 Bleeding control

9.4.4 Cervical spine injury evaluation

9.4.5 Maintaining records

9.5 Demonstrate the procedures for emergency care of injuries to the face and neck to include:

9.5.1 Face and scalp wounds

9.5.2 Facial features

9.5.3 Neck wounds

9.5.4 Laryngeal and tracheal wounds

10. Injuries to the Eye, Chest, Abdomen, and Genitalia (Suggested time 3 hours)

- After completing this module, the student will be able to:

10.1 Demonstrate the techniques of care for injuries to the eye to include:

10.1.1 Design and function of the eyeball

10.1.2 The eye as a vital sign

10.1.3 Injuries including:

10.1.3.1 Signs

10.1.3.2 Foreign bodies

10.1.3.3 Burns

10.2 Demonstrate the techniques of care for injuries to the chest to include:

10.2.1 Design and function

10.2.2 Injuries including:

10.2.2.1 Signs

10.2.3 General principles of care

10.2.4 Types of injuries including:

10.2.4.1 Rib fractures

10.2.4.2 Flail chest

10.2.4.3 Penetrating wounds

10.2.4.4 Compression injuries

10.2.4.5 Injuries to the back of the chest

10.2.5 Conditions resulting from injuries including:

10.2.5.1 Pneumothorax

10.2.5.2 Spontaneous pneumothorax

10.2.5.3 Tension pneumothorax

10.2.5.4 Hemothorax

10.2.5.5 Sucking chest wounds

10.2.5.6 Subcutaneous emphysema

10.2.5.7 Traumatic asphyxia

10.2.5.8 Pericardial tamponade

10.2.5.9 Lacerations of the great vessel

10.2.5.10 Traumatic emphysema

10.3 Demonstrate a knowledge of the techniques of care for injuries to the abdomen and genitalia to include:

10.3.1 The function of the abdominal cavity

10.3.2 The function of the digestive system

10.3.3 The function of the urinary system

10.3.4 The function of the reproductive system

10.3.5 Injuries to the abdomen including:

10.3.5.1 Types

10.3.5.2 Hollow and solid organs

10.3.5.3 Signs

10.3.5.4 Procedure for emergency care

10.3.6 Injuries to the external male genitalia including:

10.3.6.1 Types

10.3.6.2 Procedures for emergency care

10.3.7 Injuries to internal female genitalia

10.3.7.1 Procedures for emergency care

10.3.8 Injuries to external female genitalia

10.3.8.1 Procedures for emergency care

11. Medical Emergencies I (Suggested time 3 hours) - After completing this module, the student will be able to:

11.1 Describe the techniques of care for:

11.1.1 Ingested poisons

11.1.2 Procedures for emergency care

11.2 Describe the techniques of care for inhaled poisons:

11.2.1 Procedures for emergency care

11.3 Describe the techniques of care for bites and stings to include:

11.3.1 Bees, wasps, and ants

11.3.2 Spiders

11.3.3 Snakes

11.3.4 Procedures for emergency care

11.4 Describe the techniques of care for a heart attack to include:

11.4.1 Cardiac function

11.4.2 Myocardial infarction including:

11.4.2.1 Signs

11.4.2.2 Physical findings

11.4.2.3 Procedures for emergency care

11.4.3 Angina pectoris including:

11.4.3.1 Definition

11.4.3.2 Signs

11.4.3.3 Procedures for emergency care

11.4.4 Congestive heart failure including:

11.4.4.1 Definition

11.4.4.2 Signs

11.4.4.3 Procedures for emergency care

11.5 Describe the techniques of care for a stroke to include:

11.5.1 Definition of CVA

11.5.2 Causes

11.5.3 Signs

11.5.4 Procedures for emergency care

11.6 Describe the techniques of care for dyspnea to include:

11.6.1 Definition

11.6.2 Causes

11.6.3 Medical reasons

11.6.4 Stimulus to breathing

11.6.5 Chronic obstructive lung disease including:

11.6.5.1 Cause

11.6.5.2 Signs

11.6.5.3 Procedures for emergency care

11.6.6 Bronchial asthma including:

11.6.6.1 Cause

11.6.6.2 Signs

11.6.6.3 Procedures for emergency care

11.6.7 Hyperventilation including:

11.6.7.1 Cause

11.6.7.2 Signs

11.6.7.3 Procedures for emergency care

12. Medical Emergencies II (Suggested time 2.5 hours) - After completing this module, the student will be able to:

12.1 Describe the condition and demonstrate the techniques of care for diabetic coma and insulin shock to include:

12.1.1 Describing the condition

12.1.2 Diabetic coma including:

12.1.2.1 The problem

12.1.2.2 Signs

12.1.2.3 Procedures for emergency care

12.1.3 Insulin shock including:

12.1.3.1 The problem

12.1.3.2 Signs

12.1.3.3 Procedures for emergency care

12.2 Describe the condition and demonstrate the techniques of care for acute abdomen disease to include:

12.2.1 Definition

12.2.2 Signs

12.2.3 Procedures for emergency care

12.3 Describe the condition and demonstrate the techniques of care for communicable diseases including:

12.3.1 The identification of common communicable diseases

12.3.2 Procedures for emergency care

12.4 Describe the techniques of care for patients with abnormal behavior to include:

12.4.1 Reasons for abnormal behavior

12.4.2 Patient management

12.4.3 Procedures for emergency care

12.5 Demonstrate the techniques of care for patients under the influence of alcohol to include:

12.5.1 Effects

12.5.2 Signs

12.5.3 Cautions

12.5.4 Alcohol combining with other depressants

12.5.5 Withdrawal problems

12.5.6 Procedures for emergency care

12.6 Demonstrate the techniques of care for patients under the influence of drugs to include:

12.6.1 Types of drugs including definitions of:

12.6.1.1 Uppers

12.6.1.2 Downers

12.6.1.3 Hallucinogens

12.6.2 Amphetamines and cocaine

12.6.3 Hallucinogens

12.6.4 Marijuana

12.6.5 Barbiturates

12.6.6 Tranquilizers

12.6.7 Inhaled solvents

12.6.8 Opiates

12.6.9 Procedures for emergency care

12.7 Demonstrate the techniques of care for patients who have epilepsy to include:

12.7.1 Types

12.7.2 Grand Mal seizure

12.7.3 Procedures for emergency care

12.8 Describe the problems and demonstrate the techniques of care for child patients to include:

12.8.1 General techniques

12.8.2 Approach

12.8.3 Special problems including:

12.8.3.1 Fever

12.8.3.2 Convulsions

12.8.3.3 Sudden infant death syndrome

12.8.3.4 Child abuse

12.8.3.5 Sexual molestation

13. Emergency Childbirth (Suggested time 2.5 hours) - After completing this module, the student will be able to:

13.1 Define the relevant anatomy and physiology terms to include:

13.1.1 Fetus

13.1.2 Uterus

13.1.3 Placenta

13.1.4 Birth canal

13.1.5 Umbilical cord

13.1.6 Amniotic sac

13.1.7 Cervix

13.1.8 Vagina

13.1.9 Perineum

13.1.10 Crowning

13.1.11 "Bloody show"

13.1.12 Labor

13.1.13 First Stage

13.1.14 Second Stage

13.1.15 Third Stage

13.1.16 Presenting part

13.1.17 Abortion

13.1.18 Live Birth certificate

13.1.19 Fetal Death certificate

13.2 Identify the contents of a sterile delivery pack

13.3 Demonstrate the techniques of care for predelivery emergency to include:

13.3.1 Convulsions

13.3.2 Heart/lung complications

13.3.3 Hemorrhage

13.3.4 Automobile accidents

13.4 Describe the initial considerations for an emergency childbirth

13.5 Demonstrate a knowledge of the procedures for:

13.5.1 A normal delivery

13.5.2 Resuscitation of the newborn

13.5.3 A breech delivery

13.5.4 A prolapsed cord

13.5.5 Excessive bleeding

13.5.6 A multiple birth

13.5.7 An abortion (miscarriage)

13.5.8 A premature infant including:

13.5.8.1 Characteristics

13.5.8.2 Emergency care

13.5.9 Use of a premature infant carrier

14. Environmental Emergencies (Suggested time 2.5 hours) - After completing this module, the student will be able to:

14.1 Describe skin damage and the appearance of first-, second-, and third-degree burns to include:

14.1.1 Classification of burns including:

14.1.1.1 First-degree burns

14.1.1.2 Second-degree burns

14.1.1.3 Third-degree burns

14.1.2 The Rule of Nines

14.1.3 Criticality of burns

14.1.4 Classification of moderate burns

14.1.5 Management of burns

14.1.6 Chemical burns

14.1.7 Electrical burns

14.1.8 Radiation burns

14.1.9 Procedures for emergency care

14.2 Demonstrate the techniques of care for exposure to heat including:

14.2.1 Heat cramps

14.2.2 Heat exhaustion

14.2.3 Heat stroke

14.3 Demonstrate the techniques of care for exposure to cold including:

14.3.1 Heat regulation

14.3.2 General cooling of the body (hypothermia)

14.3.3 Procedures for emergency care

14.3.4 Local cooling of the body including:

14.3.4.1 The condition of the body

14.3.4.2 Frostnip

14.3.4.3 Superficial frostbite

14.3.4.4 Deep frostbite or freezing

14.4 Demonstrate a knowledge of the techniques of management for a drowning patient to include:

14.4.1 The condition of the patient

14.4.2 Rescue and patient management

14.5 Demonstrate a knowledge of the techniques of care for patients suffering diving problems to include:

14.5.1 The condition of the patient

14.5.2 Air embolism including:

14.5.2.1 The problem

14.5.2.2 Signs

14.5.2.3 Procedures for emergency care

14.5.3 The bends

14.5.3.1 The problem

14.5.3.2 Signs

14.5.3.3 Procedures for emergency care

15. Lifting and Moving Patients (Suggested time 3 hours) - After completing this module, the student will be able to:

15.1 Describe the general considerations involved in deciding the type of move to be made to include:

15.1.1 Emergency moves

15.1.2 Non-emergency moves including:

15.1.2.1 EMT protection

15.1.2.2 Vehicle moves

15.2 Demonstrate the techniques of care needed when using stretchers to include:

15.2.1 Types including:

15.2.1.1 Wheeled stretcher (Gurney)

15.2.1.2 Portable stretcher

15.2.1.3 Backboards

15.2.1.4 Scoop stretcher

15.2.2 Positioning

15.3 Demonstrate the techniques of care used in a direct, ground lift with no spine injury using two or three rescuers

15.4 Demonstrate the techniques of care used with an extremity lift, no fractures, or all fractures splinted using two rescuers

15.5 Demonstrate the techniques of care used for immobilization on short or long backboards

16. Extrication from Automobiles (Suggested time 3 hours) - After completing this module, the student will be able to:

16.1 Describe the basic considerations in the extrication of patients from an automobile to include:

16.1.1 Role of the EMT

16.1.2 Basic principles of emergency care

16.1.3 Stages of extrication

16.2 Describe the techniques used to gain access and disentanglement to include:

16.2.1 Closed upright vehicle

16.2.1.1 Opening doors

16.2.1.2 Windows

16.2.1.3 Prying doors

16.2.1.4 Cutting

16.2.2 Overturned closed vehicle including:

16.2.2.1 General rules

16.2.2.2 Stability

16.2.2.3 Opening doors

16.2.2.4 Opening windows

16.2.2.5 Pinned patients

16.2.2.6 Patients jammed inside vehicles

16.3 Demonstrate a knowledge of the packaging and removal of patients from vehicles to include:

16.3.1 Removing an unconscious patient from the front seat

16.3.2 Removing an unconscious patient from the floor between the front seat and the firewall

16.3.3 Removing an unconscious patient from the floor of the back seat

16.3.4 Removing an unconscious patient from beneath an upright car

17. Operations -- Driving and Maintaining an Emergency Vehicle, Records and Reports, Communications, and Procedures at Emergency Departments (Suggested time 3 hours) - After completing this module, the student will be able to:

17.1 Describe the laws, regulations, and ordinances relative to driving an emergency vehicle to include:

17.1.1 Factors contributing to safe driving

17.1.2 Intersection accidents

17.1.3 Examples of illnesses that represent true emergencies

17.2 Describe the general considerations required for maintaining a safe and ready vehicle to include:

17.2.1 Daily inspections

17.2.2 Inspections after each run

17.3 Describe the proper management of accurate and complete records and reports to include:

17.3.1 General considerations

17.3.2 Record forms needed

17.4 Describe the uses of various communications systems and the typical systems and procedures used in Arizona

17.5 Describe the typical EMT responsibilities and procedures used at emergency departments in Arizona

18. Responding to an Ambulance Call (Suggested time 2 hours) - After completing this module, the student will be able to:

18.1 Identify information that can aid the EMT in planning an emergency ambulance run to include:

18.1.1 Enroute to scene

18.1.2 At the scene

18.2 Describe the responsibilities of an EMT when making a patient survey to include:

18.2.1 Stages

18.2.1.1 Primary Stages

18.2.1.2 Secondary Stages

18.2.2 Gaining information at the scene

18.3 Describe the responsibilities of an EMT when triaging a patient to include:

18.3.1 Definition of triage

18.3.2 Priorities including:

18.3.2.1 Highest priority

18.3.2.2 Second priority

18.3.2.3 Lowest priority

18.4 Describe other responsibilities of an EMT at scene

18.5 Describe the responsibilities of an EMT when delivering a patient to the hospital

18.6 Describe the vital signs considered by an EMT to include:

18.6.1 Pulse including:

18.6.1.1 Rapid, strong

18.6.1.2 Rapid, weak

18.6.1.3 Slow, strong

18.6.1.4 None

18.6.2 Respiration including:

18.6.2.1 Shallow

18.6.2.2 Deep, gasping, labored

18.6.2.3 Bright, frothy blood coughed up

18.6.3 Skin temperature including:

18.6.3.1 Cool, moist

18.6.3.2 Cool, dry

18.6.3.3 Hot, dry

18.6.4 Face color including:

18.6.4.1 Red

18.6.4.2 Pale/white/ashen

18.6.4.3 Blue

18.6.5 Pupils of the eye including:

18.6.5.1 Dilated

18.6.5.2 Constricted

18.6.5.3 Unequal

18.6.6 State of consciousness including:

18.6.6.1 Confusion

18.6.6.2 Coma

18.6.7 Inability to move upon command including:

18.6.7.1 One side of body

18.6.7.2 Arms and legs

18.6.7.3 Legs

18.6.8 Reaction to physical stimulation including:

18.6.8.1 No sensation in arms and/or legs

18.6.8.2 Numbness in arms and/or legs

18.6.9 Blood pressure

18.7 Demonstrate the ability to accurately report a patient's general appearance, vital signs, and general condition

18.8 Demonstrate the ability to accurately assess a patient for life-threatening problems and for illnesses/injuries that are not life-threatening

Refresher Training Program for Basic Emergency Medical Technician Education

Inventory of Minimum Competencies

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Refresher Training Program for

Basic Emergency Medical Technician Education

The following competencies are based upon the minimal concepts that are fundamental to the scope of this course. In no manner should these competencies be construed as providing the maximum knowledge to be gained by the student in completing this course.

The overall objectives of the Refresher Training Program for Basic Emergency Medical Technician Education are:

(1) To assist the Emergency Medical Technician in maintaining basic skills and knowledge of emergency medical procedures at the Basic Emergency Medical Technician level;

(2) To update the Emergency Medical Technician with respect to emergency medical care procedures;

(3) To introduce the Emergency Medical Technician to newly developed equipment and to train them in their use;

(4) To alert the Emergency Medical Technician to changes in State licensure requirements and/or other medico-legal requirements which may affect their performance of duties in the Arizona Medical Services System.

1. Introduction to Emergency Care Training - After completing this module, the student will be able to:

   1.1 Describe the course scope and emphasis

   1.2 Define the roles and responsibilities of the EMT

   1.3 Describe the personal attitudes and conduct expected of an EMT

   1.4 Identify legal aspects of emergency care

   1.5 Identify the major body systems and their general functions

1.6 Use topographic anatomy terminology

1.7 Describe the difference between a sign and a symptom

1.8 Identify the diagnostic signs and their normal states

1.9 Identify medical identification symbols

2. Airway Obstruction and Respiratory Arrest - After completing this module, the student will be able to:

2.1 Describe the importance of oxygen to the body

2.2 Identify the components of the respiratory system and explain how the system functions

2.3 Describe the sign of adequate and inadequate breathing

2.4 Demonstrate airway care and resuscitation procedures for patients including:

2.4.1 With and without spinal injuries

2.4.2 Neck breathers

2.4.3 Infants and small children

2.5 Demonstrate, on a manikin, the use of blows to dislodge foreign objects for patients with and without suspected spinal injuries

2.6 Demonstrate, on an upright and supine manikin, the abdominal and chest thrust methods for dislodging foreign objects from the airway

2.7 Demonstrate, on an adult manikin, techniques of pulmonary resuscitation to include:

2.7.1 Mouth-to-mouth

2.7.2 Mouth-to-nose

2.8 Demonstrate, on an infant manikin, the mouth/nose techniques of pulmonary resuscitation

3. Cardiac Arrest - After completing this module, the student will be able to:

3.1 Describe how the circulatory system and heart function in supplying body cells with oxygen

3.2 Describe the signs of cardiac arrest

3.3 Demonstrate the techniques of cardiopulmonary resuscitation including:

3.3.1 Variations in techniques for infants and small children

3.4 Identify the organs near the heart to include:

3.4.1 The dangers to the patient if cardio-pulmonary resuscitation is not performed correctly

3.5 Describe when CPR should not be initiated and when it should be terminated

3.6 Demonstrate, on a manikin, CPR for a witnessed and unwitnessed arrest by a lone rescuer

3.7 Demonstrate CPR on an infant manikin

3.8 Demonstrate CPR, on a manikin, as a member of a team performing both as a ventilator and as a compressor including:

3.8.1 Changing positions

3.8.2 Transporting on a stretcher while continuing CPR

4. Mechanical Aids - After completing this module, the student will be able to:

4.1 Describe the purpose, design requirements, aseptic procedures, and demonstrate the use, on a manikin, of various mechanical aids to include:

4.1.1 Oropharyngeal airways

4.1.2 Nasopharyngeal airways

4.1.3 Portable suction unit

4.1.4 Oxygen equipment to include:

4.1.4.1 Cylinders

4.1.4.2 Pressure regulator

4.1.4.3 Flowmeters

4.1.5 Oxygen delivery systems to include:

4.1.5.1 Nasal cannula

4.1.5.2 Facemasks

4.1.5.3 Bag-masks

4.1.5.4 Venturi-masks

4.1.6 Resuscitator and oxygen delivery systems to include:

4.1.6.1 Pocket masks with oxygen inlet valve

4.1.6.2 Bag-valve-mask resuscitation

4.1.6.3 Demand valve resuscitation

4.2 Demonstrate, on a manikin, one- and two-man CPR, with the simultaneous administration of oxygen including:

4.2.1 Pocket mask, with oxygen inlet valve

4.2.2 Bag-valve-mask resuscitator

5. Bleeding, Shock, and Practice on Airway Care, Pulmonary Resuscitation and CPR - After completing this module, the student will be able to:

5.1 Describe the design, functions, and components of the circulatory system

5.2 Describe the meaning and importance of blood pressure as a vital sign

5.3 Explain the meaning of shock, signs of shock and emergency care for a shock patient

5.4 Identify the types of shock and the causes of shock

5.5 Demonstrate a knowledge of Military Anti-Shock Trousers (MAST) to include:

5.5.1 A description of the garment and its use

5.5.2 Advantageous effects including:

5.5.2.1 Auto-transfusion

5.5.2.2 Increase of vascular resistance

5.5.2.3 Tamponading effect

5.5.2.4 Decreasing hemorrhage rate

5.5.2.5 Immobilizing fractures

5.5.3 Indications for use including:

5.5.3.1 Hypovolemic shock

5.5.3.2 Systolic BP of 100mm Hg or below when shock symptoms are present

5.5.3.3 Apply but do not inflate when shock is anticipated

5.5.4 Contra-indications for use including:

5.5.4.1 No inflation when patient has:

5.5.4.1.1 Open chest wound/hemo-pneumothorax

5.5.4.1.2 Congestive heart failure

5.5.4.1.3 Pulmonary edema

5.5.4.2 Limited inflation when patient:

5.5.4.2.1 Is pregnant (inflate legs only)

5.5.4.2.2 Has abdominal evisceration (inflate legs only)

5.5.4.2.3 Is impaled on an object (do not inflate over impaled object)

5.5.5 Describe possible adverse effects from MAST suit application

5.5.6 Demonstrate the procedure for MAST suit application to include:

5.5.6.1 Application

5.5.6.2 Inflation

5.5.6.3 Monitoring of patient

5.5.7 Describe special considerations when a MAST suit is used to include:

5.5.7.1 Administration of oxygen

5.5.7.2 Local protocals

5.5.7.3 Effect of reduced pressure during air transport

5.5.7.4 Effect of environmental temperature change

5.5.8 Describe the care and maintenance of MAST suits

5.5.9 Demonstrate the procedure for the deflation and removal of a MAST suit

5.6 Distinguish among arterial, venous and capillary bleeding

5.7 Describe methods for controlling external bleeding including:

5.7.1 Nosebleeds

5.8 Describe the sign, symptoms, and emergency care for internal bleeding

5.9 Perform an examination for life-threatening problems

5.10 Take blood pressure measurements

5.11 Demonstrate the application of a tourniquet

6. Wounds - After completing this module, the student will be able to:

6.1 Describe the functions of the skin including:

6.1.1 Epidermis

6.1.2 Dermis

6.1.3 Subcutaneous tissue

6.2 Identify various types of wounds to include:

6.2.1 Signs

6.2.2 Significance

6.3 Demonstrate the emergency care appropriate to each type of wound

6.4 Demonstrate a proficiency in dressing and bandaging wounds of the following body parts to include:

6.4.1 Arm/Leg

6.4.2 Elbow/Knee

6.4.3 Top of Head

6.4.4 Forehead/Scalp

6.4.5 Ear/Cheek

6.4.6 Jaw

6.4.7 Neck

6.4.8 Shoulder/Hip

6.4.9 Hand/Foot

7. Principles of Musculoskeletal Care and Fractures of Upper Extremity - After completing this module, the student will be able to:

7.1 Describe the functions of the skeletal system

7.2 Identify all the bones of the upper extremity

7.3 Identify muscle types and give examples of each

7.4 Describe types of fractures

7.5 Distinguish among fractures, dislocations, and sprains

7.6 Describe the signs and symptoms of fractures, dislocations, and sprains

7.7 Demonstrate the procedures for examining patients for fractures of the extremities

7.8 Describe the reasons for splinting fractures

7.9 List the general rules for splinting

7.10 Describe the causes, signs, and techniques of care for fractures of the upper extremity

7.11 Demonstrate a proficiency for immobilizing fractures and dislocations of the upper extremity

8. Fractures of the Pelvis, Hips, and Lower Extremity - After completing this module, the student will be able to:

8.1 Identify the bones in the lower extremity

8.2 Identify causes, signs, dangers, and demonstrate the emergency care for:

8.2.1 Fractures of the pelvis

8.2.2 Anterior and posterior dislocations of the hip

8.2.3 Fractures of the femur

8.2.4 Sprains, dislocations, and fractures of the knee

8.2.5 Dislocations of the patella

8.2.6 Fractures of the tibula or fibula

8.2.7 Injuries about the ankle

8.2.8 Fractures of the foot

8.3 Demonstrate a proficiency for immobilizing fractures of the hip and lower extremity

8.4 Perform a patient examination for injuries

9. Injuries of the Head, Face, Neck and Spine - After completing this module, the student will be able to:

9.1 Describe the function of the nervous system

9.2 Describe the primary danger associated with fractures of the spine

9.3 Describe complications that may result from spine injuries

9.4 Demonstrate the procedure for examining a patient for spinal injuries

9.5 Identify cerebrospinal fluid to include:

9.5.1 The reason why no attempt should be made to stop bleeding from the nose or ears when a skull fracture is suspected

9.6 Describe the signs of a skull fracture and the possibility of brain injuries

9.7 Demonstrate the management of patients with skull fractures and /or with brain injuries

9.8 Describe the procedures for the continuous maintenance and evaluation of an unconscious patient

9.9 Describe the procedures for managing injuries to the face and neck

9.10 Demonstrate the immobilization procedure for patients with suspected spine injuries on short and long backboards

10. Injuries to the Eye, Chest, Abdomen, and Genitalia - After completing this module, the student will be able to:

10.1 Describe the components, design and function of:

10.1.1 Eye

10.1.2 Thorax

10.1.3 Digestive system

10.1.4 Genitourinary system

10.2 Describe the dangers and demonstrate the techniques for emergency care of:

10.2.1 Foreign bodies in the eye

10.2.2 Burns of the eye

10.2.3 Eye lacerations and contusions

10.2.4 Extruded eyeballs

10.2.5 Blunt trauma to the eye

10.3 Describe the causes, signs, dangers, and demonstrate the techniques of care for:

10.3.1 Rib fractures

10.3.2 Flail chest

10.3.3 Pneumothorax

10.3.4 Spontaneous Pneumothorax

10.3.5 Tension Pneumothorax

10.3.6 Hemothorax

10.3.7 Sucking chest wounds

10.3.8 Subcutaneous emphysema

10.3.9 Traumatic asphyxia

10.3.10 Pericardial Tamponade

10.3.11 Lacerations of great vascular vessels

10.3.12 Traumatic emphysema

10.4 Describe the types, causes, signs, dangers, and techniques of emergency care for injuries to the abdomen and genitalia

10.5 Demonstrate proficiency in:

10.5.1 Dressing and bandaging a lacerated eye containing a protruding object

10.5.2 Dressing and bandaging a sucking chest wound containing multiple rib fractures

10.5.3 Patient examination for life-threatening problems and injuries

11. Medical Emergencies I - After completing this module, the student will be able to:

11.1 Describe the causes, signs, and demonstrate the emergency care for:

11.1.1 Poisons including:

11.1.1.1 Inhaled and ingested

11.1.1.2 Bites and stings

11.1.2 Heart Attack

11.1.3 Stroke

11.1.4 Dyspnea

12. Medical Emergencies II - After completing this module, the student will be able to:

12.1 Describe the causes, signs, and demonstrate the emergency care for:

12.1.1 Diabetic coma and insulin shock

12.1.2 Acute abdominal stress

12.1.3 Communicable diseases

12.1.4 Patients with abnormal behavior

12.1.5 Alcohol and drug abuse

12.1.6 Epileptic convulsions

12.1.7 Problems in dealing with child patients

13. Emergency Childbirth - After completing this module, the student will be able to:

13.1 Describe the function of each of the following terms:

13.1.1 Fetus

13.1.2 Uterus

13.1.3 Birth Canal

13.1.4 Placenta

13.1.5 Umbilical cord

13.1.6 Amniotic sac

13.1.7 Cervix

13.1.8 Vagina

13.1.9 Perineum

13.1.10 Crowning

13.1.11 Bloody show

13.1.12 Stages of labor

13.1.13 Presenting part

13.1.14 Abortion

13.1.15 Live birth certificate

13.1.16 Fetal death certificate

13.2 Demonstrate a knowledge of predelivery emergency care

13.3 Describe the indications of an imminent delivery

13.4 Demonstrate the procedures for assisting the mother in a normal childbirth

13.5 Describe the emergency care procedures for:

13.5.1 Breech delivery

13.5.2 Prolapsed cord

13.5.3 Excessive bleeding

13.5.4 Abortion

13.5.5 Multiple birth

13.6 Demonstrate, on an obstetrical manikin, the correct procedures of emergency care for a normal and an abnormal birth

13.7 Demonstrate, on a manikin, the procedures for resuscitating the newborn including:

13.7.1 Administration of oxygen

14. Environmental Emergencies - After completing this module, the student will be able to:

14.1 Describe skin damage and identify the characteristics of first-, second-, and third-degree burns

14.2 Describe the "rule of nines" when estimating the percentage of the body burned

14.3 Identify the factors affecting the seriousness of heat burns

14.4 Describe heat burn management procedures

14.5 Describe the causes, seriousness, and management of chemical burns

14.6 Describe the appearance and management of electrical burns

14.7 Describe the EMT's role in electrically hazardous situations

14.8 Identify the ICC symbol for radioactive materials

14.9 Describe the precautions that an EMT may use to control exposure to radiation

14.10 Describe radiation emergency care procedures for the patient and the EMT

14.11 Describe the causes, sign, seriousness, and demonstrate the emergency care for patients suffering from:

14.11.1 Heat cramps

14.11.2 Heat exhaustion

14.11.3 Heat stroke

14.12 Identify five major ways in which the body loses heat

14.13 Describe the stages of emergency cooling of the body (hypothermia)

14.14 Describe the emergency care for a patient suffering from a general cooling of the body (hypothermia)

14.15 Describe signs, seriousness, and emergency care for:

14.15.1 Frostnip

14.15.2 Superficial frostbite

14.15.3 Deep frostbite

14.16 Describe the physiological effects of drowning

14.17 Demonstrate the management for drowning patients

14.18 Describe the problem, signs, and care for patients suffering from:

14.18.1 Air embolism

14.18.2 Decompression sickness

15. Lifting and Moving Patients - After completing this module, the student will be able to:

15.1 Identify considerations involved in deciding the kind of move to be made

15.2 Demonstrate emergency moves

15.3 Identify principles of lifting and moving that minimize EMT body strain

15.4 Demonstrate the use and describe the distinguishing features of:

15.4.1 Wheeled stretchers (Gurney)

15.4.2 Portable stretchers

15.4.3 Long backboards

15.4.4 Scoop stretchers

15.5 Perform a direct two-man extremity lift of a patient from the ground and position the person on a stretcher

15.6 Immobilize a patient on a long backboard, move the patient and backboard to a stretcher, and position the stretcher

15.7 Immobilize the neck and spine of a patient on a short backboard

15.8 Demonstrate the loading and unloading of stretchers

16. Extrication from Automobiles - After completing this module, the student will be able to:

16.1 Describe the role of the EMT in extrication

16.2 Describe techniques that an EMT can use to gain access or disentangle patients from vehicles

16.3 Describe techniques for packaging patients with both spine and/or other injuries trapped in a vehicle in order to remove them from the vehicle

17. Operations - After completing this module, the student will be able to:

17.1 Describe the laws relating to the operations of an emergency vehicle

17.2 Identify factors contributing to safe driving

17.3 Describe typical causes of unsafe speed and accidents

17.4 Identify vehicle systems and equipment that require daily inspection

17.5 Identify vehicle systems and equipment requiring inspection after each run

17.6 Identify the reasons for maintaining records and other information recorded by the EMT

17.7 Describe the utilization of communications systems and procedures used in the local area

17.8 Describe the EMT's responsibilities and procedures at the local emergency departments

18. Responding to an Ambulance Call - After completing this module, the student will be able to:

18.1 Identify the thought processes that may aid the EMT while responding to a medical emergency

18.2 Define and describe the implications of variations for each vital sign

18.3 Describe patients suffering from various illnesses/injuries

18.4 Perform patient examinations

18.5 Identify patients who would be considered highest, second highest, and lowest priority for triage purpose

18.6 Identify the EMT's responsibilities to include:

18.6.1 At the scene

18.6.2 En route to the hospital

18.6.3 At the hospital